## **EAST Search History**

## **EAST Search History (Prior Art)**

Ref#	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	2	jp-2002010505-\$.did.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2010/12/15 15:11
L2	2	jp-06253463-\$.did.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2010/12/15 15:11
L3	19	"5932990"	US-PGPUB; USPAT	OR	ON	2010/12/15 15:30
L4	45	320/122.ccls. and load and charger	US-PGPUB; USPAT	OR	ON	2010/12/15 15:52
L5	23	"5952815" and lithium	US-PGPUB; USPAT	OR	ON	2010/12/15 16:04
S1	17	((SHINYA) near2 (TAKAGI)). INV.	US-PGPUB; USPAT	OR	ON	2008/06/11 11:12
S2	7	((TOSHIO) near2 (MATSUSHIMA)).INV.	US-PGPUB; USPAT	OR	ON	2008/06/11 11:13
S3	19	"5680027"	US-PGPUB; USPAT	OR	ON	2008/06/11 11:13
S4	2	jp-2000166102-\$.did.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2008/06/11 11:14
S5	2	jp-2000354335-\$.did.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2008/06/11 11:14
S6	2	jp-2002058170-\$.did.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2008/06/11 11:14
S7	876	320/116,118,121,122.ccls.	US-PGPUB; USPAT	OR	ON	2008/06/11 11:54
S8	0	"105280630"	US-PGPUB; USPAT	OR	ON	2008/06/11 11:54
S9	1	"10580630"	US-PGPUB; USPAT	OR	ON	2008/06/11 11:54
S10	246	S7 and load and (power adj supply)	US-PGPUB; USPAT	OR	ON	2008/06/11 11:55
S11	188	S10 and (switch same batter \$3)	US-PGPUB; USPAT	OR	ON	2008/06/11 11:57
S12	30	S11 and ((measur\$3 or detect \$3 or sens\$3 near3 voltage) same bypass\$3)	US-PGPUB; USPAT	OR	ON	2008/06/11 11:57
S13	0	("2003/0160593").URPN.	USPAT	OR	ON	2008/06/11 11:58

S14	14	("5049804"   "5164652"   "5420493"   "5539299"   "5818199"   "5850136"   "5853908"   "5982145"   "6025696").PN. OR ("6271646").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2008/06/11 12:03
S15	15	("3997830"   "5488282"   "5825155"   "5880575"   "6014013"   "6034506"   "6046514"   "6121752"   "6157165"   "6211650"   "6262558"   "6262561"   "6265846"   "6271646"   "6373225").PN. OR ("6599655").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2008/06/11 12:04
S16	15	("4297629"   "5744936"   "5811959"   "5850136"   "5909103"   "5920181").PN. OR ("6034506").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2008/06/11 12:06
S17	25	("4614905"   "5469042"   "5523668"   "5578914"   "5617004"   "5644209").PN. OR ("5850136").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2008/06/11 12:07
S18	166	320/122.ccls.	US-PGPUB; USPAT; USOCR	OR	ON	2008/06/11 12:12
S19	46	S18 and (power adj supply) and load	US-PGPUB; USPAT; USOCR	OR	ON	2008/06/11 12:12
S20	30	S19 and (battery same switch)	US-PGPUB; USPAT; USOCR	OR	ON	2008/06/11 12:12
S21	16	S19 not S20	US-PGPUB; USPAT; USOCR	OR	ON	2008/06/11 12:19
S22	135	"320".clas. and (battery same switch) and bypass\$3 and (DC with supply) and load	US-PGPUB; USPAT; USOCR	OR	ON	2008/06/11 12:21
S23	97	S22 and regulat\$3	US-PGPUB; USPAT; USOCR	OR	ON	2008/06/11 12:21
S24	2	("2005/0073282").URPN.	USPAT	OR	ON	2008/06/11 13:23
S25	77	S18 and (battery same switch)	US-PGPUB; USPAT	OR	ON	2008/06/11 13:56
S26	15	("5049804"   "5164652"   "5420493"   "5539299"   "5818199"   "5853908"   "5932990"   "5982145"   "6014013").PN. OR ("6211650").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2008/06/11 14:02
S27	9	("5459671"   "5578914"   "5656915").PN. OR ("6014013").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2008/06/11 14:02

S28	23	("4614905"   "5469042"   "5523668"   "5578914"   "5617004"   "5644209").PN. OR ("5932990").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2008/06/11 14:03
S29	18	"5932990"	US-PGPUB; USPAT; USOCR	OR	ON	2008/06/11 14:14
S30	67	"320".clas. and bypass and (control same (current adj limiting))	US-PGPUB; USPAT; USOCR	OR	ON	2008/06/11 14:27
S31	15	"320".clas. and bypass and (control same (current adj limiting) same (switch near4 battery))	US-PGPUB; USPAT; USOCR	OR	ON	2008/06/11 14:29
S32	18	("3454859").URPN.	USPAT	OR	ON	2008/06/11 14:33
S33	3	320/116.ccls. and (control same (current adj limiting) same (switch near4 battery))	US-PGPUB; USPAT; USOCR	OR	ON	2008/06/11 15:09
S34	23	320/116.ccls. and (control same (current adj limiting))	US-PGPUB; USPAT; USOCR	OR	ON	2008/06/11 15:09
S35	18	S34 and (switch same battery)	US-PGPUB; USPAT; USOCR	OR	ON	2008/06/11 15:09
S36	369	"320".clas. and (batter\$3 near3 series) and (current adj limiting)	US-PGPUB; USPAT	OR	ON	2008/06/11 15:41
S37	58	S36 and (batter\$3 same switch same control same load)	US-PGPUB; USPAT	OR	ON	2008/06/11 15:42
S38	13	S37 and bypass\$3	US-PGPUB; USPAT	OR	ON	2008/06/11 15:42
S39	7	"6583603"	US-PGPUB; USPAT	OR	ON	2009/01/13 14:04
S40	1	320/116.ccls. and (power adj supply) and lithium and load and (current adj limit\$3) and (switch same (voltage near2 (higher or exceed\$3 or larger)))	US-PGPUB; USPAT	OR	ON	2009/01/13 15:59
S41	69	"320".clas. and (power adj supply) and lithium and load and (current adj limit\$3) and (switch same (voltage near2 (higher or exceed\$3 or larger)))	US-PGPUB; USPAT	OR	ON	2009/01/13 15:59
S42	45	"320".clas. and lithium and load and ((current adj limit\$3) same switch) and (switch same (voltage near2 (higher or exceed\$3 or larger)))	US-PGPUB; USPAT	OR	ON	2009/01/13 16:01
S43	0	wo-2002061917-\$.did.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2009/01/13 16:50

S44	1	"10580630"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2009/01/13 16:51
S45	24	"5680027"	US-PGPUB; USPAT	OR	ON	2009/06/29 13:58
S46	18	"5675233"	US-PGPUB; USPAT	OR	ON	2009/06/29 13:58
S47	156	320/122.ccls.	US-PGPUB; USPAT	OR	ON	2009/06/29 14:34
S48	41	("3413536"   "3930192"   "4238721"   "4290007"   "4331911"   "4346339"   "4467265"   "4616170"   "4656411"   "4748342"   "4876495"   "4963813"   "4967136"   "5003244"   "5063340"   "5146150"   "5153496"   "5304917"   "5313152"   "5387857"   "5412305"   "5438250").PN. OR ("5982143").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2009/06/29 15:04
S50	27	("4614905"   "5469042"   "5523668"   "5578914"   "5617004"   "5644209").PN. OR ("5850136").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2009/06/29 15:14
S51	3	("20020195994"   "5602481"   "5850136").PN. OR ("7408325").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2009/06/29 15:17
S52	97	("3413536"   "3496442"   "3505584").PN. OR ("4238721").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2009/06/29 15:29
S53	6	("4238721"   "4713597"   "6297616").PN. OR ("6388424").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2009/06/29 15:43
S54	83	(batter\$3 near equaliz\$5) and (current near limit\$4)	US-PGPUB; USPAT; USOCR	OR	ON	2009/06/29 16:03
S55	67	(batter\$3 near equaliz\$5) and ((current near limit\$4) same charg\$4)	US-PGPUB; USPAT; USOCR	OR	ON	2009/06/29 16:03
S56	0	320/116.	US-PGPUB; USPAT; USOCR	OR	ON	2009/06/29 16:25
S57	21	320/116.ccls. and (current near limit\$4) and (equaliz%5 or bypass\$4)	US-PGPUB; USPAT; USOCR	OR	ON	2009/06/29 16:25
S58	2080	(current near limit\$4) and ((equaliz%5 or bypass\$4) same (batter\$4 or cells))	US-PGPUB; USPAT; USOCR	OR	ON	2009/06/29 16:28
S59	284	S58 and "320".clas.	US-PGPUB; USPAT; USOCR	OR	ON	2009/06/29 16:29

S60	84	("3237078"   "3280397"   "3305754"   "3440514"   "3928791"   "4079303"   "4238721"   "4303877"   "4616170"   "4670703"   "4782279"   "5063340").PN. OR ("5387857").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2009/06/29 16:49
S61	7	"6583603"	US-PGPUB; USPAT	OR	ON	2009/06/30 17:22
S62	992	(Current adj limiter) same (resistor and transistor)	US-PGPUB; USPAT	OR	ON	2009/06/30 17:23
S63	34	S62 and "320".clas.	US-PGPUB; USPAT	OR	ON	2009/06/30 17:23
S64	9021	(Current adj limiting) same (resistor and transistor)	US-PGPUB; USPAT	OR	ON	2009/06/30 17:25
S65	336	S64 and "320".clas.	US-PGPUB; USPAT	OR	ON	2009/06/30 17:25
S66	171	320/122.ccls.	US-PGPUB; USPAT	OR	ON	2009/12/22 14:23
S67	23	("4238721"   "5153496"   "5206578"   "5387857"   "5498950").PN. OR ("5675233").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2009/12/22 14:47
S68	7	"6456041"	US-PGPUB; USPAT	OR	ON	2009/12/23 13:40
S69	2	"20050110453"	US-PGPUB; USPAT	OR	ON	2009/12/23 13:48
S70	1	"20020109183"	US-PGPUB; USPAT	OR	ON	2009/12/29 11:49
S71	1	"20020109483"	US-PGPUB; USPAT	OR	ON	2009/12/29 11:49
S72	173	320/122.ccls.	US-PGPUB; USPAT	OR	ON	2010/05/06 15:08
S73	25	"6118254"	US-PGPUB; USPAT	OR	ON	2010/05/06 15:09
S74	17	("5180641"   "5206578"   "5498950"   "5656915").PN. OR ("5880575").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2010/05/06 15:19
S75	15	("3997830"   "5488282"   "5825155"   "5880575"   "6014013"   "6034506"   "6046514"   "6121752"   "6157165"   "6211650"   "6262558"   "6262561"   "6265846"   "6271646"   "6373225").PN. OR ("6599655").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2010/05/06 15:26
S76	24	("4238721"   "5153496"   "5206578"   "5387857"   "5498950").PN. OR ("5675233").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2010/05/06 15:39

S77	125	320/116.ccls. and (equaliz%5 or bypass\$4)	US-PGPUB; USPAT; USOCR	OR	ON	2010/05/06 15:49
S78	3	("5602481"   "5998969"   "6150795").PN. OR ("7557539").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2010/05/06 17:47
S79	7	("20030102871"   "20040164706"   "5818200"   "5955867"   "5982145"   "6014013"   "6304059").PN. OR ("7489106").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2010/05/06 17:51
S80	48	("5576608" "5637981" "6040684" "6100670" "5739596" "5818203" "5821734" "5825155" "5903131" "5986430" "6057670" "6060185" "6060864" "6060185" "6157171" "5525890" "5592064" "5646506" "5694021" "5734253" "5744937" "5760570" "5780991" "5818200" "5831412" "5844400" "5959368" "6037750" "6044230" "6064179" "6069468" "6075344" "6118255" "6124700" "6144187" "6181107" "6191552" "6194867" "6198252" "6225782" "6225782" "6246217" "6246890" "5506075" "5526215" "5610450" "5628054" "5631537" "5652499" "5663629").pn.	US-PGPUB; USPAT	OR	2 0	2010/05/06 20:28
S81	11	("5764028"   "5796238"   "5890780").PN. OR ("6198252").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2010/05/06 20:41
S82	417	"320".clas. and (equaliz\$5 or by \$1pas\$5) and (load same charger)	US-PGPUB; USPAT; USOCR	OR	ON	2010/05/06 20:46
S83	211	S82 and (current near (regulat \$5 or limit\$4))	US-PGPUB; USPAT; USOCR	OR	ON	2010/05/06 20:46
S84	32	320/116.ccls. and (current near (regulat\$5 or limit\$4)) and (load same charger)	US-PGPUB; USPAT; USOCR	OR	ON	2010/05/06 21:01
S85	279	"320".clas. and (current near (regulat\$5 or limit\$4)) and (load same charger same (switch or transistor))	US-PGPUB; USPAT; USOCR	OR	ON	2010/05/06 21:05
S86	103	S85 and lithium	US-PGPUB; USPAT; USOCR	OR	ON	2010/05/06 21:05

S87	70	S85 and lithium and (over \$1charg\$4 or over\$1discharg \$4)	US-PGPUB; USPAT; USOCR	OR	ON	2010/05/06 21:07
S88	171	lithium and (over\$1charg\$4 or over\$1discharg\$4) and (current near (regulat\$5 or limit\$4)) and (load same charger same (switch or transistor))	US-PGPUB; USPAT; USOCR	OR	ON	2010/05/06 21:33
S89	16	("5488283"   "5557189"   "5726553"   "6229279"   "6430066"   "6624612"   "6680600"   "6700349"   "6747438"   "6812776"   "6836097"   "6861767").PN. OR ("6977480").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2010/05/06 21:38
S90	63	("1016874"   "2104973"   "3080440"   "3096215"   "3305404"   "3410725"   "3424617"   "3470025"   "3598653"   "3622397"   "3622398"   "3630778"   "3701691"   "3763416"   "3817717"   "3977906"   "3990910"   "4113924"   "4143212"   "4216274"   "4224384"   "4275127"   "4346151"   "4383011"   "4407911"   "4434214"   "4689544"   "4696873"   "4728586"   "4769299"   "4898794"   "4900642"   "4925746"   "4925747"   "4983474"   "5034289"   "5043233"   "5043234"   "5082754"   "5096667"   "5128219"   "5131920"   "5143799"   "5162169"   "5166596"   "5290640").PN. OR ("5569554").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2010/05/06 21:42
S91	53	li\$1ion and (over\$1charg\$4 or over\$1discharg\$4) and (current near (regulat\$5 or limit\$4)) and (load same charger same (switch or transistor))	US-PGPUB; USPAT; USOCR	OR	ON	2010/05/06 21:46
S92	3	320/120.ccls. and (over\$1charg \$4 or over\$1discharg\$4) and (current near (regulat\$5 or limit \$4)) and (load same charger same (switch or transistor))	US-PGPUB; USPAT; USOCR	OR	ON	2010/05/06 21:48
S93	5	320/120.ccls. and (current near (regulat\$5 or limit\$4)) and (load same charger same (switch or transistor))	US-PGPUB; USPAT; USOCR	OR	ON	2010/05/06 21:48

S94	461	"320".clas. and (current with (regulat\$5 or limit\$4)) and (load same charger same (switch or transistor))	US-PGPUB; USPAT; USOCR	OR	ON	2010/05/06 21:49
S95	100	\$94 and lithium and (over \$1charg\$4 or over\$1discharg \$4)	US-PGPUB; USPAT; USOCR	OR	ON	2010/05/06 21:49
S96	21	("5526215"   "5600247"   "5631537"   "5648715"   "5703463"   "5777454"   "5896025"   "5977751"   "6037750"   "6047380"   "6052006"   "6154012").PN. OR ("6501249").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2010/05/06 21:55
S97	21	("5526215"   "5600247"   "5631537"   "5648715"   "5703463"   "5777454"   "5896025"   "5977751"   "6037750"   "6047380"   "6052006"   "6154012").PN. OR ("6501249").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2010/05/06 22:22
S98	631	"320".clas. and (current with (control\$4)) and (load same charger same (switch or transistor))	US-PGPUB; USPAT; USOCR	OR	ON	2010/05/06 22:36
S99	158	\$98 and lithium and (over \$1charg\$4 or over\$1discharg \$4)	US-PGPUB; USPAT; USOCR	OR	ON	2010/05/06 22:36
S100	16	("4400625"   "5200644"   "5218288").PN. OR ("5898234").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2010/05/20 18:24
S101	141	"5652501"	US-PGPUB; USPAT	OR	ON	2010/05/20 20:46
S102	0	320/122.ccls. and (adapter and load same switch) and (batter \$3 same (limiter or regulator))	US-PGPUB; USPAT	OR	ON	2010/05/20 22:03
S103	114	"320".clas. and (adapter and load same switch) and (batter \$3 same (limiter or regulator))	US-PGPUB; USPAT	OR	ON	2010/05/20 22:03
S104	26	S103 and (equaliz\$5 or by\$1pas \$4)	US-PGPUB; USPAT	OR	ON	2010/05/20 22:03
S105	185	(equaliz\$5 or by\$1pas\$4) and (adapter and load same switch) and (batter\$3 same (limiter or regulator))	US-PGPUB; USPAT	OR	ON	2010/05/20 22:06
S106	159	S105 not S104	US-PGPUB; USPAT	OR	ON	2010/05/20 22:06
S107	129	(equaliz\$5 or by\$1pas\$4) and (adapter and load same switch) and (batter\$3 same (limit\$4 near current))	US-PGPUB; USPAT	OR	ON	2010/05/20 22:11

S108	0	` '	US-PGPUB; USPAT	OR	ON	2010/05/20 22:37
S109	0		US-PGPUB; USPAT	OR	ON	2010/05/20 22:37
S110	0	` ' ' ' '	US-PGPUB; USPAT	OR	ON	2010/05/20 22:38
S111	21	3 ( - - <b>)</b>	US-PGPUB; USPAT	OR	ON	2010/05/20 22:38
S112	2	"6501249" and ("106" same "108")	US-PGPUB; USPAT	OR	ON	2010/07/01 21:39
S113	0	"5402055" and ("28" same charging)	US-PGPUB; USPAT	OR	ON	2010/07/01 21:58
S114	3	"5402055" and ("28" same charg\$4)	US-PGPUB; USPAT	OR	ON	2010/07/01 21:58
S115	19	"5932990"	US-PGPUB; USPAT	OR	ON	2010/07/01 22:16

## 12/ 15/ 2010 4:57:54 PM

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